#8/Response w/ attach Hawkins 1-28-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Clark T.-C. Nguyen

Group Art Unit: 2834

Examiner: Thomas M. Dougherty

Serial No.: 09/839,436

Filed: April 20, 2001

For: METHOD AND APPARATUS FOR FILTERING SIGNALS UTILIZING A VIBRATING MICROMECHANICAL RESONATOR

Attorney Docket No.: UOM 0233 PUS

REPLY

Box AF
Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

Sir:

REMARKS

As noted on page 1 of this application, this application is a continuation-in-part of an application which resulted in U.S. Patent No. 6,249,073 (i.e., '073 patent), a copy of which is enclosed herewith for the Examiner's reference. Claim 1 of the '073 patent reads as follows:

1. A micromechanical resonator device having an operating frequency, a resonator formed on a substrate and a support structure anchored to the substrate to support the resonator above the substrate characterized in that:

the support structure is attached at at least one nodal point of the resonator and the support structure and the resonator are both dimensioned so that the resonator is isolated during resonator vibration wherein energy losses to the substrate are substantially eliminated

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Commissioner for Patents, United States Patent and Trademark Office, Washington, D.C. 20231 on:

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Signature

and wherein the resonator device is a high-Q resonator device.

In like fashion, the independent claims of the present application require that both the support structure and the resonator be dimensioned so that the resonator is isolated from the support structure during resonator vibration wherein energy losses to the substrate are substantially eliminated and wherein the apparatus is a high-Q apparatus.

In other words, the present application builds on the '073 patent in that the present application is a method and apparatus for filtering signals utilizing a vibrating micromechanical resonator of the type described and claimed in the '073 patent.

Also, in the '073 patent the Nguyen, et al. article entitled "Design And Performance of CMOS Micromechanical Resonator Oscillators" and the Lin, et al. patent 5,537,083 were cited, yet the '073 patent was allowed thereover.

Consequently, Applicant's Attorney is at a loss to understand how the claims of the '073 patent are patentable yet the independent claims of the present application are not patentable in view of the same art. The prior art, taken either alone or in combination with one another, simply fail to teach, disclose or discuss a resonator and a support structure both dimensioned so that the resonator is isolated from the support structure during resonator vibration. In this way, energy losses to the substrate are substantially eliminated and the apparatus is a high-Q apparatus.

Applicant's Attorney understands that the claims are broad. However, the inventor is entitled to such broad protection especially in view of the prior art cited both here and in the '073 patent.

In view of the above, Applicant's Attorney requests either a telephonic or an in person interview, and the Examiner is requested to call the undersigned to set up such interview. However, the Examiner may view the above comments as being persuasive and allow the case to issue.

Consequently, in view of the above and in the absence of better art, Applicant's Attorney respectfully submits the application is in condition for allowance which allowance is respectfully requested.

Respectfully submitted,

Clark T.-C. Nguyen

By:_____

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Date: December 31, 2002

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